

Environmental Studies Program: Studies Development Plan | FY 2023–2024

Title	Update of Port Modification Study (AT-23-02)
Administered by	Office of Renewable Energy Programs
BOEM Contact(s)	Mary Boatman (mary.boatman@boem.gov)
Procurement Type(s)	Contract
Conducting Organization(s)	TBD
Total BOEM Cost	TBD
Performance Period	FY 2023–2025
Final Report Due	TBD
Date Revised	April 21, 2022
PICOC Summary	-
<i>Problem</i>	Increased potential for offshore wind development requires a reassessment of port impacts.
<i>Intervention</i>	Update the existing study of port impacts from offshore wind development
<i>Comparison</i>	The study will evaluate changes in the port capacity and planned updates to ports with the previous study.
<i>Outcome</i>	The product will be a more up to date evaluation of port modifications anticipated along the Atlantic Coast.
<i>Context</i>	Atlantic Coast from Maine to Florida

BOEM Information Need(s): As the offshore wind energy industry develops, it will be important for Federal, state, and local stakeholders to understand the environmental and socioeconomic consequences of such development, including the impacts from port expansion and changes in port operations. BOEM will need to evaluate the potential environmental and socioeconomic impacts of port expansions as connected actions in project specific and programmatic environmental impact statements.

Background: Facilities to support activities related to offshore wind energy development will more often than not be located at existing ports near the areas leased. Development activities will lead to port expansion to accommodate the size of construction vessels, space required for staging and maneuvering turbine components, and cranes capable of handling the weight of the nacelles and other components. The potential expansion and changes in operations resulting will produce a variety of environmental effects (e.g., air, soil and water quality) and socioeconomic effects (land use changes, employment changes, strain on existing infrastructure, conflict with other port uses, increased vessel traffic). BOEM previously evaluated these potential port expansions (ESS Group, Inc. 2016). Since the publication of this report, industry has submitted over ten construction and operations plans that identify potential ports that may be used for construction and operation activities. In addition, some states such as New Jersey have announced the creation of hubs to support the industry. BOEM is assessing these port modifications as connected activities in National Environmental Policy Act assessments and needs this updated report to improve these evaluations.

Objectives: This study will update our understanding of:

- Current port capacity for handling offshore wind facility construction and the necessary modifications required to support this function.
- Environmental and socioeconomic impacts including environmental justice from port modifications and the consequences of alterations to port operations.
- Effectiveness of potential mitigation measures for port modifications impacts based on experience to date.

Methods: The study will update the port characteristics (e.g., distance to likely project locations, size of staging/storage areas, quayside length, access channel depth and width) necessary to support offshore energy facility construction based on the past report (ESS Group, Inc. 2016). At this point, 11 construction and operations plans from developers are available to determine the ports being considered. Several states including New Jersey and Virginia have proposed dedicated ports or port modifications to support offshore wind. Additional research will be conducted to determine any co-benefits or potential conflicts related to modifications and operational changes as some ports prepare for larger post-Panamax ships. Additional discussions, potentially through focus groups, will be held with port authorities, wind energy developers, and turbine manufacturers to update assumptions and to collect additional insights on desired port characteristics, potential environmental and socioeconomic impacts, and mitigations for these impacts.

Information from the construction and operations plans currently in review will be used to identify and prioritize the ports that are proposed for use. BOEM will select 20 of these ports for a detailed assessment. The more detailed port profiles will discuss other port users, financial structure and health, any environmental justice concerns and sociocultural contexts, along with the likely environmental and socioeconomic impacts that may occur if the port becomes a wind energy hub.

A comprehensive final report will be prepared combining the information collected from the literature search, stakeholder discussions, port rankings, port profiles, and recommendations for further research.

Specific Research Question(s): How will ports be modified to support offshore wind development, and what will the environmental impacts be?

Current Status: N/A

Publications Completed: N/A

Affiliated WWW Sites: N/A

References:

ESS Group, Inc. 2016. The identification of port modifications and the environmental and socioeconomic consequences. Sterling (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 99 p. Report No.: OCS Study BOEM 2016-034.